

SEQUENCE LISTING

#11/13

<110> Ashkenazi, Avi J.  
Baker, Kevin  
Gurney, Austin  
Wood, William

<120> Apo-2DcR

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<140> US 08/878,168

<141> 1997-06-18

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Glu	Val	Pro	Gln	Gln	Thr	Val	Ala	Pro	Gln	Gln	Gln	Arg	His	Ser	Phe
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Lys	Gly	Glu	Glu	Cys	Pro	Ala	Gly	Ser	His	Arg	Ser	Glu	His	Thr	Gly
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Ala	Cys	Asn	Pro	Cys	Thr	Glu	Gly	Val	Asp	Tyr	Thr	Asn	Ala	Ser	Asn
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Asn	Glu	Pro	Ser	Cys	Phe	Pro	Cys	Thr	Val	Cys	Lys	Ser	Asp	Gln	Lys
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His	Lys	Ser	Ser	Cys	Thr	Met	Thr	Arg	Asp	Thr	Val	Cys	Gln	Cys	Lys
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Glu	Gly	Thr	Phe	Arg	Asn	Glu	Asn	Ser	Pro	Glu	Met	Cys	Arg	Lys	Cys
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Ser	Arg	Cys	Pro	Ser	Gly	Glu	Val	Gln	Val	Ser	Asn	Cys	Thr	Ser	Trp
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Asp	Asp	Ile	Gln	Cys	Val	Glu	Glu	Phe	Gly	Ala	Asn	Ala	Thr	Val	Glu
145					150				155					160	
Thr	Pro	Ala	Ala	Glu	Glu	Thr	Met	Asn	Thr	Ser	Pro	Gly	Thr	Pro	Ala
			165						170					175	
Pro	Ala	Ala	Glu	Glu	Thr	Met	Asn	Thr	Ser	Pro	Gly	Thr	Pro	Ala	Pro
			180					185					190		
Ala	Ala	Glu	Glu	Thr	Met	Thr	Thr	Ser	Pro	Gly	Thr	Pro	Ala	Pro	Ala
	195						200					205			
Ala	Glu	Glu	Thr	Met	Thr	Thr	Ser	Pro	Gly	Thr	Pro	Ala	Pro	Ala	Ala

210	Glu	Glu	Thr	Met	Thr	Thr	215	Ser	Pro	Gly	Thr	Pro	220	Ala	Ser	Ser	His	Tyr
225						230						235						240
Leu	Ser	Cys	Thr	Ile	Val	Gly	Ile	Ile	Val	Leu	Ile	Val	Leu	Leu	Leu	Ile		
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Val	Phe	Val																

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agagcgcccc	ggccgcctga	tggccgaggc	aggggtgcgc	ccaggaccca	ggacggcgtc	180
gggaaccata	cc atg gcc	cgg atc ccc	aag acc cta	aag ttc gtc	gtc gtc gtc	231
	Met Ala Arg	Ile Pro Lys	Thr Leu Lys	Phe Val Val	Val Val Val	
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atc gtc gcg gtc ctg ctg cca gtc cta gct tac tct gcc acc act gcc	279
Ile Val Ala Val Leu Leu Pro Val Leu Ala Tyr Ser Ala Thr Thr Ala	
15 20 25	

cgg cag gag gaa gtt ccc cag cag aca gtg gcc cca cag caa cag agg	327
Arg Gln Glu Glu Val Pro Gln Gln Thr Val Ala Pro Gln Gln Gln Arg	
30 35 40 45	

cac agc ttc aag ggg gag gag tgt cca gca gga tct cat aga tca gaa	375
His Ser Phe Lys Gly Glu Glu Cys Pro Ala Gly Ser His Arg Ser Glu	
50 55 60	

cat act gga gcc tgt aac ccg tgc aca gag ggt gtg gat tac acc aac	423
His Thr Gly Ala Cys Asn Pro Cys Thr Glu Gly Val Asp Tyr Thr Asn	
65 70 75	

gct tcc aac aat gaa cct tct tgc ttc cca tgt aca gtt tgt aaa tca	471
Ala Ser Asn Asn Glu Pro Ser Cys Phe Pro Cys Thr Val Cys Lys Ser	
80 85 90	

gat caa aaa cat aaa agt tcc tgc acc atg acc aga gac aca gtg tgt	519
Asp Gln Lys His Lys Ser Ser Cys Thr Met Thr Arg Asp Thr Val Cys	
95 100 105	

cag tgt aaa gaa ggc acc ttc cgg aat gaa aac tcc cca gag atg tgc	567
Gln Cys Lys Glu Gly Thr Phe Arg Asn Glu Asn Ser Pro Glu Met Cys	
110 115 120 125	

cgg aag tgt agc agg tgc cct agt ggg gaa gtc caa gtc agt aat tgt	615
Arg Lys Cys Ser Arg Cys Pro Ser Gly Glu Val Gln Val Ser Asn Cys	
130 135 140	
acg tcc tgg gat gat atc cag tgt gtt gaa gaa ttt ggt gcc aat gcc	663
Thr Ser Trp Asp Asp Ile Gln Cys Val Glu Glu Phe Gly Ala Asn Ala	
145 150 155	
act gtg gaa acc cca gct gct gaa gag aca atg aac acc agc ccg ggg	711
Thr Val Glu Thr Pro Ala Ala Glu Glu Thr Met Asn Thr Ser Pro Gly	
160 165 170	
act cct gcc cca gct gct gaa gag aca atg aac acc agc cca ggg act	759
Thr Pro Ala Pro Ala Ala Glu Glu Thr Met Asn Thr Ser Pro Gly Thr	
175 180 185	
cct gcc cca gct gct gaa gag aca atg acc acc agc ccg ggg act cct	807
Pro Ala Pro Ala Ala Glu Glu Thr Met Thr Thr Ser Pro Gly Thr Pro	
190 195 200 205	
gcc cca gct gct gaa gag aca atg acc acc agc ccg ggg act cct gcc	855
Ala Pro Ala Ala Glu Glu Thr Met Thr Thr Ser Pro Gly Thr Pro Ala	
210 215 220	
cca gct gct gaa gag aca atg acc acc agc ccg ggg act cct gcc tct	903
Pro Ala Ala Glu Glu Thr Met Thr Thr Ser Pro Gly Thr Pro Ala Ser	
225 230 235	
tct cat tac ctc tca tgc acc atc gta ggg atc ata gtt cta att gtg	951
Ser His Tyr Leu Ser Cys Thr Ile Val Gly Ile Ile Val Leu Ile Val	
240 245 250	
ctt ctg att gtg ttt gtt tgaaagactt cactgtggaa gaaattcctt	999
Leu Leu Ile Val Phe Val	
255	
ccttacctga aagggttcagg taggcgctgg ctgagggcgg ggggcgctgg acactctctg	1059
ccctgcctcc ctctgctgtg ttccacaga cagaaacgcc tgcccctgcc ccaaaaaaaaa	1119
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	1179
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 Gln Asp Gly Val Gly Asn His Thr Met Ala Arg Ile Pro Lys Thr Leu  
 35 40 45

Lys	Phe	Val	Val	Val	Ile	Val	Ala	Val	Leu	Leu	Pro	Val	Leu	Ala	Tyr
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Ser	Ala	Thr	Thr	Ala	Arg	Gln	Glu	Glu	Val	Pro	Gln	Gln	Thr	Val	Ala
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Pro	Gln	Gln	Gln	Arg	His	Ser	Phe	Lys	Gly	Glu	Glu	Cys	Pro	Ala	Gly
				85					90					95	
Ser	His	Arg	Ser	Glu	His	Thr	Gly	Ala	Cys	Asn	Pro	Cys	Thr	Glu	Gly
			100					105					110		
Val	Asp	Tyr	Thr	Asn	Ala	Ser	Asn	Asn	Glu	Pro	Ser	Cys	Phe	Pro	Cys
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Thr	Val	Cys	Lys	Ser	Asp	Gln	Lys	His	Lys	Ser	Ser	Cys	Thr	Met	Thr
	130					135					140				
Arg	Asp	Thr	Val	Cys	Gln	Cys	Lys	Glu	Gly	Thr	Phe	Arg	Asn	Glu	Asn
145					150					155					160
Ser	Pro	Glu	Met	Cys	Arg	Lys	Cys	Ser	Arg	Cys	Pro	Ser	Gly	Glu	Val
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Gln	Val	Ser	Asn	Cys	Thr	Ser	Trp	Asp	Asp	Ile	Gln	Cys	Val	Glu	Glu
			180					185					190		
Phe	Gly	Ala	Asn	Ala	Thr	Val	Glu	Thr	Pro	Ala	Ala	Glu	Glu	Thr	Met
	195						200					205			
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	210					215					220				
Thr	Ser	Pro	Gly	Thr	Pro	Ala	Pro	Ala	Ala	Glu	Glu	Thr	Met	Thr	Thr
225					230					235					240
Ser	Pro	Gly	Thr	Pro	Ala	Pro	Ala	Ala	Glu	Glu	Thr	Met	Thr	Thr	Ser
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Pro	Gly	Thr	Pro	Ala	Pro	Ala	Ala	Glu	Glu	Thr	Met	Thr	Thr	Ser	Pro
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Gly	Thr	Pro	Ala	Ser	Ser	His	Tyr	Leu	Ser	Cys	Thr	Ile	Val	Gly	Ile
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Met Gln Gly Val Lys Glu Arg Phe Leu Pro Leu Gly Asn															
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tct ggg gac aga gcg ccc cgg ccg cct gat ggc cga ggc agg gtg cga															159
Ser Gly Asp Arg Ala Pro Arg Pro Pro Asp Gly Arg Gly Arg Val Arg															

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ccc agg acc cag gac ggc gtc ggg aac cat acc atg gcc cgg atc ccc	207		
Pro Arg Thr Gln Asp Gly Val Gly Asn His Thr Met Ala Arg Ile Pro			
-10 -5 1 5			
aag acc cta aag ttc gtc gtc gtc atc gtc gcg gtc ctg ctg cca gtc	255		
Lys Thr Leu Lys Phe Val Val Val Ile Val Ala Val Leu Leu Pro Val			
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cta gct tac tct gcc acc act gcc cgg cag gag gaa gtt ccc cag cag	303		
Leu Ala Tyr Ser Ala Thr Thr Ala Arg Gln Glu Glu Val Pro Gln Gln			
25 30 35			
aca gtg gcc cca cag caa cag agg cac agc ttc aag ggg gag gag tgt	351		
Thr Val Ala Pro Gln Gln Gln Arg His Ser Phe Lys Gly Glu Glu Cys			
40 45 50			
cca gca gga tct cat aga tca gaa cat act gga gcc tgt aac ccg tgc	399		
Pro Ala Gly Ser His Arg Ser Glu His Thr Gly Ala Cys Asn Pro Cys			
55 60 65			
aca gag ggt gtg gat tac acc aac gct tcc aac aat gaa cct tct tgc	447		
Thr Glu Gly Val Asp Tyr Thr Asn Ala Ser Asn Asn Glu Pro Ser Cys			
70 75 80 85			
ttc cca tgt aca gtt tgt aaa tca gat caa aaa cat aaa agt tcc tgc	495		
Phe Pro Cys Thr Val Cys Lys Ser Asp Gln Lys His Lys Ser Ser Cys			
90 95 100			
acc atg acc aga gac aca gtg tgt cag tgt aaa gaa ggc acc ttc cgg	543		
Thr Met Thr Arg Asp Thr Val Cys Gln Cys Lys Glu Gly Thr Phe Arg			
105 110 115			
aat gaa aac tcc cca gag atg tgc cgg aag tgt agc agg tgc cct agt	591		
Asn Glu Asn Ser Pro Glu Met Cys Arg Lys Cys Ser Arg Cys Pro Ser			
120 125 130			
ggg gaa gtc caa gtc agt aat tgt acg tcc tgg gat gat atc cag tgt	639		
Gly Glu Val Gln Val Ser Asn Cys Thr Ser Trp Asp Asp Ile Gln Cys			
135 140 145			
gtt gaa gaa ttt ggt gcc aat gcc act gtg gaa acc cca gct gct gaa	687		
Val Glu Glu Phe Gly Ala Asn Ala Thr Val Glu Thr Pro Ala Ala Glu			
150 155 160 165			
gag aca atg aac acc agc ccg ggg act cct gcc cca gct gct gaa gag	735		
Glu Thr Met Asn Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu Glu			
170 175 180			
aca atg aac acc agc cca ggg act cct gcc cca gct gct gaa gag aca	783		
Thr Met Asn Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu Glu Thr			
185 190 195			

atg acc acc agc ccg ggg act cct gcc cca gct gct gaa gag aca atg	831
Met Thr Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu Glu Thr Met	
200 205 210	
acc acc agc ccg ggg act cct gcc cca gct gct gaa gag aca atg acc	879
Thr Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu Glu Thr Met Thr	
215 220 225	
acc agc ccg ggg act cct gcc tct tct cat tac ctc tca tgc acc atc	927
Thr Ser Pro Gly Thr Pro Ala Ser Ser His Tyr Leu Ser Cys Thr Ile	
230 235 240 245	
gta ggg atc ata gtt cta att gtg ctt ctg att gtg ttt gtt	969
Val Gly Ile Ile Val Leu Ile Val Leu Leu Ile Val Phe Val	
250 255	
tgaaagactt cactgtggaa gaaattcctt ccttacctga aaggttcagg taggcgctgg	1029
ctgagggcgg ggggcgctgg acactctctg ccctgcctcc ctctgctgtg ttcccacaga	1089
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Lys	

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 Lys Ser Ser Cys Thr Met Thr Arg Asp Thr Val Cys Gln Cys Lys Glu  
 35 40 45

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 aggcagcggg 70

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 aagagcgttc cctaccgcc atg gaa caa cgg gga cag aac gcc ccg gcc gct 172  
 Met Glu Gln Arg Gly Gln Asn Ala Pro Ala Ala  
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tcg ggg gcc cgg aaa agg cac ggc cca gga ccc agg gag gcg cgg gga 220  
 Ser Gly Ala Arg Lys Arg His Gly Pro Gly Pro Arg Glu Ala Arg Gly  
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gcc agg cct ggg ctc cgg gtc ccc aag acc ctt gtg ctc gtt gtc gcc 268  
 Ala Arg Pro Gly Leu Arg Val Pro Lys Thr Leu Val Leu Val Val Ala  
 30 35 40

gcg gtc ctg ctg ttg gtc tca gct gag tct gct ctg atc acc caa caa 316  
 Ala Val Leu Leu Leu Val Ser Ala Glu Ser Ala Leu Ile Thr Gln Gln  
 45 50 55

gac cta gct ccc cag cag aga gcg gcc cca caa caa aag agg tcc agc 364  
 Asp Leu Ala Pro Gln Gln Arg Ala Ala Pro Gln Gln Lys Arg Ser Ser  
 60 65 70 75

ccc	tca	gag	gga	ttg	tgt	cca	cct	gga	cac	cat	atc	tca	gaa	gac	ggt	412
Pro	Ser	Glu	Gly	Leu	Cys	Pro	Pro	Gly	His	His	Ile	Ser	Glu	Asp	Gly	
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aga	gat	tgc	atc	tcc	tgc	aaa	tat	gga	cag	gac	tat	agc	act	cac	tgg	460
Arg	Asp	Cys	Ile	Ser	Cys	Lys	Tyr	Gly	Gln	Asp	Tyr	Ser	Thr	His	Trp	
			95					100					105			
aat	gac	ctc	ctt	ttc	tgc	ttg	cgc	tgc	acc	agg	tgt	gat	tca	ggt	gaa	508
Asn	Asp	Leu	Leu	Phe	Cys	Leu	Arg	Cys	Thr	Arg	Cys	Asp	Ser	Gly	Glu	
		110					115					120				
gtg	gag	cta	agt	ccc	tgc	acc	acg	acc	aga	aac	aca	gtg	tgt	cag	tgc	556
Val	Glu	Leu	Ser	Pro	Cys	Thr	Thr	Thr	Arg	Asn	Thr	Val	Cys	Gln	Cys	
	125					130					135					
gaa	gaa	ggc	acc	ttc	cgg	gaa	gaa	gat	tct	cct	gag	atg	tgc	cgg	aag	604
Glu	Glu	Gly	Thr	Phe	Arg	Glu	Glu	Asp	Ser	Pro	Glu	Met	Cys	Arg	Lys	
140					145					150					155	
tgc	cgc	aca	ggg	tgt	ccc	aga	ggg	atg	gtc	aag	gtc	ggt	gat	tgt	aca	652
Cys	Arg	Thr	Gly	Cys	Pro	Arg	Gly	Met	Val	Lys	Val	Gly	Asp	Cys	Thr	
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ccc	tgg	agt	gac	atc	gaa	tgt	gtc	cac	aaa	gaa	tca	ggc	atc	atc	ata	700
Pro	Trp	Ser	Asp	Ile	Glu	Cys	Val	His	Lys	Glu	Ser	Gly	Ile	Ile	Ile	
			175					180					185			
gga	gtc	aca	gtt	gca	gcc	gta	gtc	ttg	att	gtg	gct	gtg	ttt	gtt	tgc	748
Gly	Val	Thr	Val	Ala	Ala	Val	Val	Leu	Ile	Val	Ala	Val	Phe	Val	Cys	
		190					195					200				
aag	tct	tta	ctg	tgg	aag	aaa	gtc	ctt	cct	tac	ctg	aaa	ggc	atc	tgc	796
Lys	Ser	Leu	Leu	Trp	Lys	Lys	Val	Leu	Pro	Tyr	Leu	Lys	Gly	Ile	Cys	
	205					210					215					
tca	ggt	ggt	ggt	ggg	gac	cct	gag	cgt	gtg	gac	aga	agc	tca	caa	cga	844
Ser	Gly	Gly	Gly	Gly	Asp	Pro	Glu	Arg	Val	Asp	Arg	Ser	Ser	Gln	Arg	
220					225					230					235	
cct	ggg	gct	gag	gac	aat	gtc	ctc	aat	gag	atc	gtg	agt	atc	ttg	cag	892
Pro	Gly	Ala	Glu	Asp	Asn	Val	Leu	Asn	Glu	Ile	Val	Ser	Ile	Leu	Gln	
				240					245					250		
ccc	acc	cag	gtc	cct	gag	cag	gaa	atg	gaa	gtc	cag	gag	cca	gca	gag	940
Pro	Thr	Gln	Val	Pro	Glu	Gln	Glu	Met	Glu	Val	Gln	Glu	Pro	Ala	Glu	
			255					260					265			
cca	aca	ggt	gtc	aac	atg	ttg	tcc	ccc	ggg	gag	tca	gag	cat	ctg	ctg	988
Pro	Thr	Gly	Val	Asn	Met	Leu	Ser	Pro	Gly	Glu	Ser	Glu	His	Leu	Leu	
		270					275					280				



gaa ccg gca gaa gct gaa agg tct cag agg agg agg ctg ctg gtt cca	1036
Glu Pro Ala Glu Ala Glu Arg Ser Gln Arg Arg Arg Leu Leu Val Pro	
285 290 295	
gca aat gaa ggt gat ccc act gag act ctg aga cag tgc ttc gat gac	1084
Ala Asn Glu Gly Asp Pro Thr Glu Thr Leu Arg Gln Cys Phe Asp Asp	
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ttt gca gac ttg gtg ccc ttt gac tcc tgg gag ccg ctc atg agg aag	1132
Phe Ala Asp Leu Val Pro Phe Asp Ser Trp Glu Pro Leu Met Arg Lys	
320 325 330	
ttg ggc ctc atg gac aat gag ata aag gtg gct aaa gct gag gca gcg	1180
Leu Gly Leu Met Asp Asn Glu Ile Lys Val Ala Lys Ala Glu Ala Ala	
335 340 345	
ggc cac agg gac acc ttg tac acg atg ctg ata aag tgg gtc aac aaa	1228
Gly His Arg Asp Thr Leu Tyr Thr Met Leu Ile Lys Trp Val Asn Lys	
350 355 360	
acc ggg cga gat gcc tct gtc cac acc ctg ctg gat gcc ttg gag acg	1276
Thr Gly Arg Asp Ala Ser Val His Thr Leu Leu Asp Ala Leu Glu Thr	
365 370 375	
ctg gga gag aga ctt gcc aag cag aag att gag gac cac ttg ttg agc	1324
Leu Gly Glu Arg Leu Ala Lys Gln Lys Ile Glu Asp His Leu Leu Ser	
380 385 390 395	
tct gga aag ttc atg tat cta gaa ggt aat gca gac tct gcc wtg tcc	1372
Ser Gly Lys Phe Met Tyr Leu Glu Gly Asn Ala Asp Ser Ala Xaa Ser	
400 405 410	
taagtgtgat tctcttcagg aagtgagacc ttccctgggt tacctttttt ctggaaaaag	1432
cccaactgga ctccagtcag taggaaagt ccacaattgt cacatgaccg gtactggaag	1492
aaactctccc atccaacatc acccagtgga tggaacatcc tgtaactttt cactgcactt	1552
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ccgtttgtgc gtactttgag atttggtttt ggatgtcatt gttttcacag cactttttta	1672
tcctaataatgta aatgctttat ttattttattt gggctacatt gtaagatcca tctacaaaaa	1732
aaaaaaaaaa aaaaaaaggg cggccgcgcac tctagagtcg acctgcagaa gcttggccgc	1792
catggcc	1799

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35 40 45	

Val	Ser	Ala	Glu	Ser	Ala	Leu	Ile	Thr	Gln	Gln	Asp	Leu	Ala	Pro	Gln
50						55					60				
Gln	Arg	Ala	Ala	Pro	Gln	Gln	Lys	Arg	Ser	Ser	Pro	Ser	Glu	Gly	Leu
65					70					75					80
Cys	Pro	Pro	Gly	His	His	Ile	Ser	Glu	Asp	Gly	Arg	Asp	Cys	Ile	Ser
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Cys	Lys	Tyr	Gly	Gln	Asp	Tyr	Ser	Thr	His	Trp	Asn	Asp	Leu	Leu	Phe
			100					105					110		
Cys	Leu	Arg	Cys	Thr	Arg	Cys	Asp	Ser	Gly	Glu	Val	Glu	Leu	Ser	Pro
		115					120					125			
Cys	Thr	Thr	Thr	Arg	Asn	Thr	Val	Cys	Gln	Cys	Glu	Glu	Gly	Thr	Phe
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Arg	Glu	Glu	Asp	Ser	Pro	Glu	Met	Cys	Arg	Lys	Cys	Arg	Thr	Gly	Cys
145					150					155					160
Pro	Arg	Gly	Met	Val	Lys	Val	Gly	Asp	Cys	Thr	Pro	Trp	Ser	Asp	Ile
				165					170					175	
Glu	Cys	Val	His	Lys	Glu	Ser	Gly	Ile	Ile	Ile	Gly	Val	Thr	Val	Ala
			180					185					190		
Ala	Val	Val	Leu	Ile	Val	Ala	Val	Phe	Val	Cys	Lys	Ser	Leu	Leu	Trp
		195					200					205			
Lys	Lys	Val	Leu	Pro	Tyr	Leu	Lys	Gly	Ile	Cys	Ser	Gly	Gly	Gly	Gly
	210					215					220				
Asp	Pro	Glu	Arg	Val	Asp	Arg	Ser	Ser	Gln	Arg	Pro	Gly	Ala	Glu	Asp
225					230					235					240
Asn	Val	Leu	Asn	Glu	Ile	Val	Ser	Ile	Leu	Gln	Pro	Thr	Gln	Val	Pro
				245					250					255	
Glu	Gln	Glu	Met	Glu	Val	Gln	Glu	Pro	Ala	Glu	Pro	Thr	Gly	Val	Asn
			260					265					270		
Met	Leu	Ser	Pro	Gly	Glu	Ser	Glu	His	Leu	Leu	Glu	Pro	Ala	Glu	Ala
		275					280					285			
Glu	Arg	Ser	Gln	Arg	Arg	Arg	Leu	Leu	Val	Pro	Ala	Asn	Glu	Gly	Asp
	290					295					300				
Pro	Thr	Glu	Thr	Leu	Arg	Gln	Cys	Phe	Asp	Asp	Phe	Ala	Asp	Leu	Val
305					310					315					320
Pro	Phe	Asp	Ser	Trp	Glu	Pro	Leu	Met	Arg	Lys	Leu	Gly	Leu	Met	Asp
				325					330					335	
Asn	Glu	Ile	Lys	Val	Ala	Lys	Ala	Glu	Ala	Ala	Gly	His	Arg	Asp	Thr
			340					345					350		
Leu	Tyr	Thr	Met	Leu	Ile	Lys	Trp	Val	Asn	Lys	Thr	Gly	Arg	Asp	Ala
		355					360					365			
Ser	Val	His	Thr	Leu	Leu	Asp	Ala	Leu	Glu	Thr	Leu	Gly	Glu	Arg	Leu
	370					375					380				
Ala	Lys	Gln	Lys	Ile	Glu	Asp	His	Leu	Leu	Ser	Ser	Gly	Lys	Phe	Met
385					390					395					400
Tyr	Leu	Glu	Gly	Asn	Ala	Asp	Ser	Ala	Xaa	Ser					
				405					410						

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29

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30

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Arg	Ala	Arg	Ala	Gly	Arg	Ala	Pro	Gly	Pro	Pro	Pro	Ala	Arg	Glu	Ala
			20					25					30		
Ser	Pro	Arg	Leu	Arg	Val	His	Lys	Thr	Phe	Lys	Phe	Val	Val	Val	Gly
		35					40					45			
Val	Leu	Leu	Gln	Val	Val	Pro	Ser	Ser	Ala	Ala	Thr	Ile	Lys	Leu	His
	50				55						60				
Asp	Gln	Ser	Ile	Gly	Thr	Gln	Gln	Trp	Glu	His	Ser	Pro	Leu	Gly	Glu
65					70					75					80
Leu	Cys	Pro	Pro	Gly	Ser	His	Arg	Ser	Glu	Arg	Pro	Gly	Ala	Cys	Asn
				85					90					95	
Arg	Cys	Thr	Glu	Gly	Val	Gly	Tyr	Thr	Asn	Ala	Ser	Asn	Asn	Leu	Phe
			100					105					110		
Ala	Cys	Leu	Pro	Cys	Thr	Ala	Cys	Lys	Ser	Asp	Glu	Glu	Glu	Arg	Ser
		115					120					125			
Pro	Cys	Thr	Thr	Thr	Arg	Asn	Thr	Ala	Cys	Gln	Cys	Lys	Pro	Gly	Thr
	130					135					140				
Phe	Arg	Asn	Asp	Asn	Ser	Ala	Glu	Met	Cys	Arg	Lys	Cys	Ser	Thr	Gly
145					150					155					160
Cys	Pro	Arg	Gly	Met	Val	Lys	Val	Lys	Asp	Cys	Thr	Pro	Trp	Ser	Asp
				165					170					175	
Ile	Glu	Cys	Val	His	Lys	Glu	Ser	Gly	Asn	Gly	His	Asn	Ile	Trp	Val
			180					185					190		
Ile	Leu	Val	Val	Thr	Leu	Val	Val	Pro	Leu	Leu	Leu	Val	Ala	Val	Leu
		195					200					205			
Ile	Val	Cys	Cys	Cys	Ile	Gly	Ser	Gly	Cys	Gly	Gly	Asp	Pro	Lys	Cys
	210					215					220				
Met	Asp	Arg	Val	Cys	Phe	Trp	Arg	Leu	Gly	Leu	Leu	Arg	Gly	Pro	Gly
225					230					235					240
Ala	Glu	Asp	Asn	Ala	His	Asn	Glu	Ile	Leu	Ser	Asn	Ala	Asp	Ser	Leu
				245					250					255	
Ser	Thr	Phe	Val	Ser	Glu	Gln	Gln	Met	Glu	Ser	Gln	Glu	Pro	Ala	Asp
			260					265					270		
Leu	Thr	Gly	Val	Thr	Val	Gln	Ser	Pro	Gly	Glu	Ala	Gln	Cys	Leu	Leu
		275				280						285			
Gly	Pro	Ala	Glu	Ala	Glu	Gly	Ser	Gln	Arg	Arg	Arg	Leu	Leu	Val	Pro

290	Ala	Asn	Gly	Ala	Asp	Pro	Thr	Glu	Thr	Leu	Met	Leu	Phe	Phe	Asp	Lys
305	Phe	Ala	Asn	Ile	Val	Pro	Phe	Asp	Ser	Trp	Asp	Gln	Leu	Met	Arg	Gln
				325						330					335	
	Leu	Asp	Leu	Thr	Lys	Asn	Glu	Ile	Asp	Val	Val	Arg	Ala	Gly	Thr	Ala
				340					345					350		
	Gly	Pro	Gly	Asp	Ala	Leu	Tyr	Ala	Met	Leu	Met	Lys	Trp	Val	Asn	Lys
				355				360					365			
	Thr	Gly	Arg	Asn	Ala	Ser	Ile	His	Thr	Leu	Leu	Asp	Ala	Leu	Glu	Arg
				370			375					380				
	Met	Glu	Glu	Arg	His	Ala	Lys	Glu	Lys	Ile	Gln	Asp	Leu	Leu	Val	Asp
385						390					395				400	
	Ser	Gly	Lys	Phe	Ile	Tyr	Leu	Glu	Asp	Gly	Thr	Gly	Ser	Ala	Val	Ser
				405						410					415	
	Leu	Glu														

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	Leu	Gly	Leu	Arg	Glu	Ala	Glu	Ile	Glu	Ala	Val	Glu	Val	Glu	Ile	Gly
				20					25					30		
	Arg	Phe	Arg	Asp	Gln	Gln	Tyr	Glu	Met	Leu	Lys	Arg	Trp	Arg	Gln	Gln
			35				40					45				
	Gln	Pro	Ala	Gly	Leu	Gly	Ala	Val	Tyr	Ala	Ala	Leu	Glu	Arg	Met	Gly
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	Leu	Asp	Gly	Cys	Val	Glu	Asp	Leu	Arg	Ser						
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	Leu	Gly	Leu	Ser	Asp	His	Glu	Ile	Asp	Arg	Leu	Glu	Leu	Gln	Asn	Gly
				20					25					30		
	Arg	Cys	Leu	Arg	Glu	Ala	Gln	Tyr	Ser	Met	Leu	Ala	Thr	Trp	Arg	Arg
			35				40					45				
	Arg	Thr	Pro	Arg	Arg	Glu	Ala	Thr	Leu	Glu	Leu	Leu	Gly	Arg	Val	Leu
		50				55						60				
	Arg	Asp	Met	Asp	Leu	Leu	Gly	Cys	Leu	Glu	Asp	Ile	Glu	Glu		
65						70				75						

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1				5					10					15	
Asn	Gly	Val	Asn	Glu	Ala	Lys	Ile	Asp	Glu	Ile	Lys	Asn	Asp	Asn	Val
			20					25					30		
Gln	Asp	Thr	Ala	Glu	Gln	Lys	Val	Gln	Leu	Leu	Arg	Asn	Trp	His	Gln
		35					40					45			
Leu	His	Gly	Lys	Lys	Glu	Ala	Tyr	Asp	Thr	Leu	Ile	Lys	Asp	Leu	Lys
	50					55					60				
Lys	Ala	Asn	Leu	Cys	Thr	Leu	Ala	Glu	Lys	Ile	Gln	Thr			
65					70					75					